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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,477	10/07/2003	Makoto Shiomi	12480-000019/US	6638
30593 7590 05/16/2008 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195				
EXAMINER				
PATEL, NITIN				
ART UNIT		PAPER NUMBER		
2629				
MAIL DATE		DELIVERY MODE		
05/16/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/679,477

**Applicant(s)**

SHIOMI ET AL.

**Examiner**

Nitin Patel

**Art Unit**

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-134 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-13, 20-25, 56-97 and 99-134 is/are allowed.
- 6) ☒ Claim(s) 98 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 14-19 and 26-55 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 98 is rejected under 35 U.S.C. 101 because claim language claimed a program adapted to cause computer execute the steps of and there is no where in claim state how the program is include instruction to perform or where it is stored on computer, either outside or inside of the commuter system, there is no tangible limitation with the claim 98 is supportive to computer program to execute the step. And the claimed invention is directed to non-statutory subject matter.

***Allowable Subject Matter***

2. Claims 1-13, 20-25, 56-97, 99-134 are allowed.

The prior art fails to teach or suggest a method of driving a display comprising:  
storing data corresponding to a drive signal input at a first time; changing a voltage level of a drive signal input at a second time, subsequent to the first time, based upon the stored data so as to accelerate a tone transition from the first time to the second time and comparing data corresponding to the drive signal input at the first time and data input at a time previous to the first time, wherein a degree of the change is adjustable prior to changing with reference to the result of the comparison as claimed in claim 1.

The prior art fails to teach or suggest a display, comprising: memory means for storing data of a drive signal input at a first time; change means for changing a voltage level of a drive signal input at a second time, subsequent to the first time, based upon the stored data so as to accelerate a tone transition from the first time to the second time; comparison result memory means for storing a result of a comparison of the stored data corresponding to the drive signal input at the first time and data input at a time previous to the first time; and adjusting means for adjusting a degree of the changing by the change means with reference to the result of the comparison stored in the comparison result memory means as claimed in claim 95.

The prior art fails to teach or suggest a drive signal processor for processing a display drive signal, comprising: memory means for storing data of a drive signal input at a first time; change means for changing a voltage level of a drive signal input at a second time, subsequent to the first time, based upon the stored data so as to accelerate a tone transition from the first time to the second time; comparison result memory means for storing a result of a comparison of the stored data corresponding to the drive signal input at the first time and data input at a time previous to the first time; and adjusting means for adjusting a degree of the changing by the change means with reference to the result of the comparison stored in the comparison result memory means as claimed in claim 97,99,100,101.

***Conclusion***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nitin Patel whose telephone number is 571-272-7677. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 571-272-7664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nitin Patel/  
Primary Examiner, Art Unit 2629

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Art Unit 2629